



Puget Sound Georgia Basin Ecosystem Indicator Report

Executive Summary



Solid Waste and Recycling

Insufficient Progress 

The Puget Sound Georgia Basin Ecosystem Indicators give a glimpse into the health of our ecosystem, which includes the interactions among seven million people, their health, local economies and a complex system of water, land, plants, animals and microorganisms. This indicator describes the diversion and disposal of solid waste (also known as municipal solid waste, MSW, trash, refuse or garbage) in the Puget Sound Georgia Basin from 1999 through 2003. Solid waste is largely an untold story, like the tip of an iceberg. In the “wasteberg,” only six percent of materials — such as chemicals, metal and mining ores, trees, fibers and petroleum — actually end up in a product. The remaining 94 percent is transformed during the manufacturing process into wasted heat and energy, ‘non-specified’ materials or commercial or industrial waste.

What is Happening?

In 2003, the citizens and businesses of the Puget Sound Georgia Basin sent more than six million tons of garbage to landfills or incinerators. This single year of waste is enough to fill Interstate 5 from Olympia, Washington to Whistler, BC more than one foot deep in garbage. However, in this same year, another six million tons of products and materials avoided the fate of landfills. In fact, 2003 was a record year for reducing landfill waste through the *diversion* of products or materials. This is good news because *diversion* includes materials that are reused as intact products, recycled, refined, or control burned for energy recovery. Diversion does not include backyard burning or illegal dumping. The bottom line is that while the region is diverting more materials from landfills and incinerators, our overall waste generation and disposal rates grew at a more rapid pace than the increase in our population.

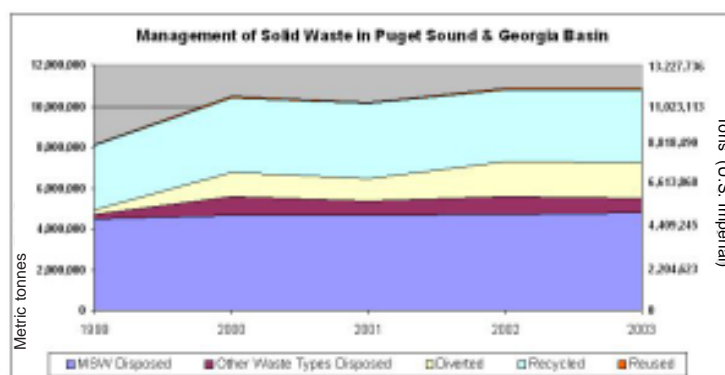


Chart: Washington State Dept. of Ecology

Why Is It Happening?

Patterns of solid waste generation are firmly tied to the cultural aspects of our society. Solid waste generation, disposal and diversion rates are based on a complex interaction of the following factors:

- Demographic profile: The region has a high per capita income, which can lead to more waste because more products are purchased and used
- Changes in family size: For 20 years, household size has steadily decreased. Many smaller households produce more per capita waste than larger households.
- Greater use of convenience products and eating outside the home
- Substantial increase in manufacturing and marketing of convenience products that are used once and then discarded as garbage
- Emphasis on recycling without addressing waste reduction

How Does This Affect Me?

Garbage may be out of sight, but not without serious implications. Excessive solid waste generation leads to the following:

- Lost economic opportunities and manufacturing inefficiencies. Thousands of new jobs could be created in the region by expanding and starting businesses focused on reuse, manufacturing and recycling
- Toxics in products exported to countries outside North America, particularly electronics that are laden with toxic chemicals
- Cost and time to handle products and waste
- Environmental and human health impacts from landfilling and incineration of garbage
- Exposure to harmful substances found in products (see the *Toxics in Harbor Seals Indicator*)

http://www.epa.gov/region10/psgb/indicators/solid_waste/

What Are We Doing About It?

Reducing waste intelligently creates opportunities for each of us, including communities, governments and private businesses.

- British Columbia regions and Washington counties have adopted regional solid waste management plans
- Governments and non-profits offer technical assistance in waste prevention and reduction, and recycling, with an emphasis on paper and food waste
- Product stewardship for manufacturers: These efforts focus on asking manufacturers to design products for their entire life cycle so they are made into second generation products or can be composted. Learn more at BC Ministry of Environment | Product Stewardship: www.env.gov.bc.ca/epd/epdpa/ips/progdev/ Northwest Product Stewardship Council: www.productstewardship.net and Washington State Department of Ecology | Beyond Waste: www.ecy.wa.gov/beyondwaste/
- Using purchasing strategies and specifications to reduce waste, toxicity and promote durable goods that last: Pacific Northwest Pollution Prevention Resource Center | Environmentally Preferable Purchasing: www.pprc.org/pubs/epp/epp_report.cfm



Photo: Kitsap County Solid Waste

What Can I Do?

Your Tool Box

- Buy products with extended warranties
- Avoid disposable products and buy products with recyclable packaging
- Think creatively — send “experiential” gifts and wrap with old maps and other materials
- Shop consignment and buy used products online
- Use paper with respect — print double-sided, reduce margins, or don't print at all
- Compost and donate food. Ninety-six billion tons of edible food are thrown out as garbage each year in the U.S.
- Bring your own cloth bag to shop and break the plastic bag habit. A significant percentage of our fossil fuels are used to make plastic products that end up in marine waters, where they kill marine life.

Additional Solid Waste & Recycling Resources

Inform: www.informinc.org

Sustainable Business:

www.sustainablebusiness.org

Community Futures:

www.communityfutures.ca

Green Conference Initiative:

www.epa.gov/oppt/greenmeetings/

National Waste Prevention Coalition:

www.metrokc.gov/dnrr/swd/nwpc/

BC Ministry of the Environment:

www.env.gov.bc.ca/epd/epdpa/mpp/reduction.htm

Learn more http://www.epa.gov/region10/psgb/indicators/solid_waste/
Share what's important to you and your community
<http://www.epa.gov/region10/psgb/contact/>



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The Puget Sound Georgia Basin Ecosystem Indicators Report is a collaborative effort brought to you by Federal, State, Provincial and Local partners from the United States and Canada.